

NCDOT Inv #	Name	Location	Latitude	Longitude	Manufacturer	Model #
05-0134	Equipment Cabinet	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5500	35.6873	McCain	Type-332
05-0134	Junction Box # 1 (Phase 2 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5516	35.6879	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 2 (Phase 2 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5506	35.6876	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 3 (Near Cabinet)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5501	35.6873	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 4 (Phase 6 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5486	35.6873	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 5 (Phase 6 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5493	35.6876	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 6 (Phase 4 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5503	35.6879	Quazite	PG1118BA12(Box) PG118HA00(Cover)

Figure 1716-1. Spreadsheet. Submit coordinate information in a spreadsheet provided by the Department and in accordance with this article.

1716-4 MEASUREMENT AND PAYMENT

Junction Box (____) will be measured and paid in actual number of junction boxes of each size and type furnished, installed and accepted.

No measurement will be made of covers, graded stone and grounding systems as these will be incidental to furnishing and installing junction boxes.

Payment will be made under:

Pay Item

Junction Box (____)

Pay Unit

Each

SECTION 1720 WOOD POLES

1720-1 DESCRIPTION

Furnish and install poles, grounding systems and all necessary hardware.

1720-2 MATERIAL

Refer to Division 10.

Item

Grounding Electrodes
Inspection Requirements
Wire
Wood Poles

Section

1091-6
1082
1091-2
1082

Section 1721

Furnish material, equipment and hardware under this section that is pre-approved on the ITS and Signals QPL for wood poles available on the Department's website.

1720-3 CONSTRUCTION METHODS

Mark final pole locations and receive approval before installing poles. Unless otherwise specified, locate poles a minimum of 6 ft behind face of curb or 10 ft from edge of travelway. Ensure poles are of sufficient length to maintain the minimum required clearances above the roadway, obstructions and affected railroad tracks.

Drill or auger a hole for placement of pole and to allow for compacting. Set pole at manufacturer's recommended depth, but at a minimum depth of 5 ft. Ensure the pole is within 2 degrees of vertical when fully loaded.

Backfill hole with pole installed and tamp backfill in 6 inch lifts with a mechanical tamp until compacted density is at least 95% of original density.

On new Department-owned poles, install a grounding system consisting of #6 AWG solid bare copper wire that is exothermically welded to a single ground rod installed at base of pole or to the electrical service grounding electrode system located within 10 ft of the pole. Install ground wire so as to minimize damage from vandalism and environmental exposures. Install ground wire up pole to a point adjacent to the uppermost span. Use hot-dipped galvanized wire staples to secure ground wire to pole.

1720-4 MEASUREMENT AND PAYMENT

Wood Pole will be measured and paid as the actual number of wood poles furnished, installed and accepted.

No measurement will be made for installing grounding systems as these will be incidental to furnishing and installing wood poles.

Payment will be made under:

Pay Item	Pay Unit
Wood Pole	Each

SECTION 1721 GUY ASSEMBLIES

1721-1 DESCRIPTION

Furnish and install guy assemblies with all necessary hardware.

1721-2 MATERIAL

Refer to Division 10.

Item	Section
Guy Assembly	1098-7
Pole Line Hardware	1098-6

Furnish material, equipment and hardware under this section that is pre-approved on the ITS and Signals QPL.

1721-3 CONSTRUCTION METHODS

(A) Guy Assemblies for Signal Heads or Lead-in Cable

Install guy assemblies with guy cable, guy guards, anchors, 3-bolt clamps and associated fittings. Use 2-bolt attachment method where there is adequate room on the pole to comply with the NESC. Attach guy assembly and guy cable to 2 separate bolts with one bolt for span and one bolt for guy cable.